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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,827	01/14/2004	Yoshio Miyamoto	042018	2379
38834	7590	06/01/2005	EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			TRIEU, VAN THANH	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/756,827

Applicant(s)

MIYAMOTO ET AL.

Examiner

Van T. Trieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 8 is/are allowed.
- 6) ☒ Claim(s) 1 and 3-6 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/2904.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by **Partio et al** [US 6,021,150].

Regarding claim 1, the claimed an electronic digital pressure switch for detecting a gas pressure and generating an output, comprising: a housing that has a ventilating portion allowing a gas to pass there through (the discharge chamber containing laser gas and electronic that regulate a function of the laser housed within a baffle enclosure by a gas sensor 330, a temperature sensor 600, pressure sensitive switch and indicator to monitor pressure and shut-off the laser. The baffle enclosure includes an upper and lower solid panels 210, which have holes or slots for allowing air flows through much of the enclosure for ventilating, removing or sweeping out biologically-incompatible gases that may leak within the interior of the enclosure, see Figs. 2 and 6, col. 4, lines 42-52, col. 5, lines 62-67, col. 6, lines 16-28 and 44-50, col. 7, lines 24-27, col. 8, lines 38-56, col. 10, lines 49-55 and col. 11, lines 29-32).

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Regarding claim 3, the claimed ventilation portions are at both upper and lower portions of the housing (the holes or slots in both upper and lower panels 210, see Fig. 1).

Regarding claim 4, the contact output that turns ON/OFF according to detected pressure and that allows ON and OFF values to be set (the control electronic 150 allows to set of pressure and flow rate desired values, and to turn ON/OFF the layer according to the detected pressure level, see Fig. 1, col. 6, lines 9-15, col. 7, lines 11-27, col. 8, lines 48-56 and col. 10, lines 14-55); and the display means, which reads upon the control electronic 150 to provide indicating of detected temperature, pressure, flow volume, on/off valve and ON/OFF laser conditions, see Fig. 1, col. 7, lines 11-27 and col. 10, lines 35-55.; and the analog output that changes its output values according to detected pressure (the temperature and/or pressure sensor outputs analog signals, see col. 7, lines 24-67 and col. 9, lines 48-50).

Regarding claim 5, the claimed plurality of the contact outputs, which read upon the control electronic 150 comprising more than one contact outputs for controlling and indicating the status of on/off valve, on/off laser and switches, see Figs. 1, 6 and 9.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Partio et al** [US 6,021,150] in view of **Rocci, Jr. et al** [US 5,676,129].

Regarding claim 6, **Partio et al** fails to disclose delay time can be set for the contact output or the contact outputs. However, **Partio et al** teaches that the control electronic 150 includes a microprocessor for manually and/or automatically controlling and indicating statuses/conditions of the detected temperature, pressure, flow volume, on/off valve and ON/OFF laser conditions, see Fig. 1, col. 6, lines 5-15, col. 7, lines 11-27, col. 10, lines 35-55 and col. 11, lines 29-51. **Rocci, Jr. et al** suggests that a microprocessor 14 is programmed to display the remaining doses, the elapse time and a predetermined delay time period for providing reliability detect a pressure pulse by a miniature pressure sensor 12, ON/OFF values and displaying on a display 15, see Figs. 1-8, col. 5, lines 26-67 and col. 6, lines 1-67. Therefore, it would have been obvious to one skill in the art at the time the invention was made substitute the microprocessor programmable

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functions of **Rocci Jr., et al** for the microprocessor controller of **Partio et al** because the microprocessor is a digital electronic device having memories, which can be programmed to execute a different operation functions such as delaying time for providing a higher detecting pressure outputs.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Watson et al discloses a laser discharging chamber that includes ventilating panels for weeping out of undesired gases within the chamber according to the pressure switch.

[US 5,748,656]

Zheng et al discloses a modular gas control device for use with a compressed gas cylinder comprising a pressure sensor and a ventilating system within a gas cabinet or housing for ventilate of the leakage gases. [US 6,314,986]

Campell discloses a method of sensing a ventilation failure measures a ventilation cycle and if the pressure is not maintained throughout the whole of an inspiration period above the setting for the low datum point an alarm is signaled. [US 5,640,149]

Sagimiya discloses switch device for pressure switch displays data about high level of setting values used to turn switch ON and OFF of switch. [JP 20011168701A]

4. Claims 7 and 8 are allowable over the prior art.

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5. Claims 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Any inquiry concerning this communication or earlier communications from examiner should be directed to primary examiner **Van Trieu** whose telephone number is (571) 272-2972. The examiner can normally be reached on Mon-Fri from 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. **Jeffery Hofsass** can be reached on (571) 272-2981.

A handwritten signature in black ink, appearing to read 'Van Trieu', with a long horizontal flourish extending to the right.

Van Trieu
Primary Examiner
Date: 5/26/05